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MARSHALL, GERSTEIN & BORUN LLP		PREVIL, DANIEL

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DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _30 December 2003_.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-29_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-29_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _09092004_.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

DETAILED ACTION

Claims 1-29 are presented for examination.

Claim Objections

1.   Claim 10 is objected to because of the following informalities: Claim 10, line 2

delete "the" between (when and classifying). Appropriate correction is required.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3.   Claims 1-5, 10-13, 16-29 are rejected under 35 U.S.C. 102(e) as being

anticipated by Gardner et al. (US 2002/0091473).

Regarding claim 1, Gardner discloses a method of classifying an activity

state of a driver (prioritized information to maintain safe operation of the vehicle)

(page 2, ref. 0010; page 4, ref. 0036) comprising: providing an at least two-state

activity classifier (below threshold value/non-maneuver and exceed threshold

value/maneuver) (page 5, ref. 0043); receiving sensor data relating to at least

one vehicle operating condition (receiving the sensor fusion module relating to

the operating of the vehicle) (fig. 4, ref. 402; page 7, ref. 0062); classifying the

driver activity (driver may receive cellular telephone calls if the cognitive load is

below a threshold value) (page 5, ref. 0043 and ref. 0051) into one of at least two

states based upon the sensor data (fusion sensor data) (fig. 1, ref. 102), a first of

the at least two states corresponding to a maneuver activity (driver can not

receive cellular telephone calls) (page 5, ref. 0043) and a second of the at least

two states corresponding to a non-maneuver activity (driver can receive cellular

telephone calls) (page 5, ref. 0043).

Regarding claim 2, Gardner discloses the step of classifying the state of

the driver activity as maneuver when engaged in an activity corresponding to one of a

change in the position of a vehicle with respect to a communication with an external

party (driver can not accept cellular telephone calls) (page 5, ref. 0043; page 6, ref.

0052-0053).

Regarding claim 3, Gardner discloses the step of classifying the state of

the driver as non-maneuver when disengaged from an activity corresponding to one of a

change in the position of a vehicle with to a communication with an external party

(driver can accept cellular telephone calls) (page 5, ref. 0043; page 6, ref. 0052-0053).

Regarding claim 4, Gardner discloses the step of receiving a second

sensor data relating to a least one of a condition of the driver (fig. 4, ref. 406;

page 7, lines 0062-0065).

Regarding claim 5, Gardner discloses the step of analyzing a position and

a rate of change of the position of a brake (page 7, ref. 0062).

Regarding claim 10, Gardner discloses altering the presentation of an

event in the vehicle when classifying the activity state of the driver is maneuver

(page 5, ref.0051; page 6, ref. 0052).

Regarding claim 11, Gardner discloses the event is a wireless

communication (cellular telephone) (page 5, ref. 0051).

Regarding claim 12, Gardner discloses a two-state classification

apparatus below threshold value/non-maneuver and exceed threshold

value/maneuver) (page 5, ref. 0043); for classifying an activity state of a

driver (driver may receive cellular telephone calls if the cognitive load is

below a threshold value) (page 5, ref. 0043 and ref. 0051) comprising: an

input (fusion module 102) for receiving sensor data relating to at least one

vehicle condition (fig. 4, ref. 402; page 7, ref. 0062) and a processor (302)

(fig. 3) coupled to the input (fig. 3), wherein the processor (302) (fig. 3)

analyzes the sensor data to determine a classification of the activity state

(driver may accept or terminate cellular telephone calls) of the driver into a

maneuver (page 5, ref. 0043; page 6, ref. 0056-0059).

Regarding claim 13, Gardner discloses an output for conveying a

signal relating to the classification of the activity state of the driver (the

cellular telephone 300 is caused to operate in a vibrate service state to announce an incoming call) (fig. 1; page 6, ref. 0059).

Regarding claim 16, Gardner discloses the classification of non-maneuver enables an event in the vehicle (driver can receive cellular telephone calls When the cognitive is below a threshold value) (page 5, ref. 0043; page 6, ref. 0052).

Regarding claim 17, Gardner discloses the classification of maneuver delays an event in the vehicle (driver can not accept the cellular telephone calls when the cognitive load is exceeded the threshold value) (page 5, ref. 0043; page 6, ref. 0052).

Regarding claim 18, Gardner discloses an event notification of a change in state of an other apparatus in the vehicle (fig. 1; page 6, ref. 0052).

Regarding claim 19, Gardner discloses the sensor data corresponds to a driver activity data (page 7, ref. 0063).

Regarding claim 20, Gardner discloses the processor analyzes the sensor data corresponding to a driver identification (page 5, ref. 0044-0045).

Regarding claim 21, Gardner discloses one vehicle condition is a driver state and a passenger state (page 3, ref. 0028; page 7, ref. 0063).

Regarding claim 22, Gardner discloses one vehicle condition is a brake pedal position (page 7, ref. 0062).

Regarding claim 23, Gardner discloses the classification

corresponds to a current condition of the sensor data (page 4, ref. 0041).

Regarding claim 24, Gardner discloses the classification

corresponds to a past condition of the sensor data (page 8, ref. 0071).

Regarding claim 25, Gardner discloses a vehicle arranged and

constructed to use a classification of an activity state of a driver

(prioritized information to maintain safe operation of the vehicle) (page 2,

ref. 0010; page 4, ref. 0036) comprising: a classification apparatus

(system 100) for providing a signal corresponding to one of maneuver and

non-maneuver (below threshold value/non-maneuver and exceed

threshold value/maneuver) (page 5, ref. 0043), the signal based on a

sensor data related to at least one operational condition (page 7, ref.

0062); and a device operable to use the signal for determining a timing for

notifying the driver of an event (system 100 continuously evaluates the

information to be provided it to the driver to determine when to best

provide it to the driver) (page 3, ref. 0031).

Regarding claim 26, Gardner discloses the signal corresponds to a

non-maneuver (driver can accept cellular telephone calls) (page 5, ref.

0043; page 6, ref. 0052-0053) and the timing is immediate for notifying the

driver of the event (page 3, ref. 0031 and ref. 0034).

Regarding claim 27, Gardner discloses the signal corresponds to maneuver (driver can not accept cellular telephone calls) (page 5, ref. 0043; page 6, ref. 0052-0053) and the timing is delayed for notifying the driver of the event (re-timing its presentation to the driver) (page 3, ref. 0031)

Regarding claim 28, Gardner discloses the device is a wireless communication device (cellular telephones) (page 5, ref. 0051).

Regarding claim 29, Gardner discloses operational condition is an entertainment device condition (infotainment) (page 7, ref. 0063).

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5.   Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gardner et al. in view of Geisler et al. (US 2004/0088205).

Regarding claim 6, Gardner discloses all the limitations in claim 1 but fails to explicitly disclose the driver activity state using one of instantaneous sensor data and prior sensor data.

However, Geisler discloses the step of classifying the driver activity state using instantaneous sensor data (fig. 1, ref. 110; page 1, ref. 0012).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Geisler in Gardner. Doing so would have provided the system with the capability of providing the driver with prioritized information to prevent the driver from being distracted by less important information and to preclude accident from happening for the safety purposes as taught by Geisler (page 1, ref. 0003).

Claims 7- 9, are rejected under 35 U.S.C. 103(a) as being unpatentable over Gardner et al. (US 2002/0091473) in view of William Cohen (ML95 provided by Applicant).

Regarding claim 7, Garner discloses all the limitations in claim 1 but fails to explicitly disclose the step of classifying the driver activity state using one of a linear function the sensor data and a non-linear function of the sensor data.

However, Cohen discloses a linear function (fig. 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of William Cohen in Gardner. Doing so would facilitate driving function by eliminating driver errors for the safety purposes as taught by Cohen (abstract).

Regarding claim 8, Gardner and William Cohen disclose all the limitations in claim 7 and William Cohen further discloses a statistical classifier (C4.5 rules)

(abstract). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of William Cohen in Gardner. Doing so would facilitate driving function by eliminating driver errors for the safety purposes as taught by Cohen (abstract).

Regarding claim 9, Gardner and William Cohen disclose all the limitations in claim 7 and William Cohen discloses a C4.5, a Ripper (abstract, page 7, ref. 4.4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of William Cohen in Gardner. Doing so would improve the driver performance by significantly reduce the error rates for the safety purposes as taught by William Cohen (abstract).

1.   Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gardner et al. in view of William Cohen (ML95 provided by Applicant).

Regarding claim 14, Gardner discloses all the limitations in claim 12 but fails to explicitly disclose a statistical classifier.

However, William Cohen discloses a statistical classifier (C4.5 rules). (abstract).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of William Cohen in Gardner. Doing so would facilitate driving function by eliminating driver errors for the safety purposes as taught by Cohen (abstract).

Regarding claim 15, Gardner and William Cohen disclose all the

limitations in claim 12 and William Cohen further discloses a C4.5, a

Ripper and a Quadratic classifier (abstract, page 7, ref. 4.4). Therefore, it

would have been obvious to one of ordinary skill in the art at the time the

invention was made to incorporate the teaching of William Cohen in

Gardner. Doing so would improve the driver performance by significantly

reduce the error rates for the safety purposes as taught by William Cohen

(abstract).

Conclusion

2.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

Kinoshita et al. (US 5,642,093) discloses a warning system for vehicle.

Kubota et al. (US 6,401,029) discloses an assist device in designation of

destination.

Pter-Contesse (US 4,155,525) discloses a maneuver detector circuit for use in

autothrottle control systems having thrust and flight path control decoupling.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Daniel Previl whose telephone number is 703 305-1028.

The examiner can normally be reached on Monday-Thursday. The examiner can also

be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jeffrey Hofsass can be reached on 703 305-4717. The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

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Daniel Previl
Examiner
Art Unit 2636

DP
September 9, 2004.